

AMENDMENTS TO THE CLAIMS

1-12(canceled)

13.(new) Method of preparing, by free radical emulsion polymerization, of ultrafine hydrophobic latex polymer or copolymer particles, making use therefor, in order to polymerize or copolymerize monomers or monomer mixtures respectively, of at least one purified compound as a chain transfer agent (CTA), wherein said latex particles have an average particle size of less than 100 nm, being more than 10 % lower than if prepared in the absence of said CTA, characterized in that said polymerization is conducted in a water-based reaction in the presence of a chain transfer agent and of a surfactant, wherein said surfactant is present in a concentration versus said monomer or monomer mixture of from 5 up to 25 % by weight for a non-ionic surfactant or from 0.05 up to 10 % by weight for an ionic surfactant.

14.(new) Method according to claim 13, wherein said surfactant is present in a concentration below twice its critical micelle concentration.

15.(new) Method according to claim 13, wherein said dimers are selected from the group consisting of alpha-methyl vinyl compounds or alpha-ethyl vinyl compounds.

- 16.(new) Method according to claim 14, wherein said dimers are selected from the group consisting of alpha-methyl vinyl compounds or alpha-ethyl vinyl compounds.
- 17.(new) Method according to claim 13, wherein said dimer is selected from the group consisting of dimers or cross-dimers of -methylstyrene, methyl methacrylate, hydroxy ethylacrylate, benzyl methacrylate, allyl methacrylate, methacrylonitrile, glycidyl methacrylate, methacrylic acid, tert.-butyl methacrylate, isocyanatoethyl methacrylate, meta-isopropenyl-, -dimethyl isocyanate (TMI), omega-sulfoxyalkyl methacrylates and alkali salts thereof.
- 18.(new) Method according to claim 14, wherein said dimer is selected from the group consisting of dimers or cross-dimers of -methylstyrene, methyl methacrylate, hydroxy ethylacrylate, benzyl methacrylate, allyl methacrylate, methacrylonitrile, glycidyl methacrylate, methacrylic acid, tert.-butyl methacrylate, isocyanatoethyl methacrylate, meta-isopropenyl-, -dimethyl isocyanate (TMI), omega-sulfoxyalkyl methacrylates and alkali salts thereof.
- 19.(new) Method according to claim 15, wherein said dimer is selected from the group consisting of dimers or cross-dimers of -methylstyrene, methyl methacrylate, hydroxy ethylacrylate, benzyl methacrylate, allyl methacrylate, methacrylonitrile, glycidyl methacrylate,

methacrylic acid, tert.-butyl methacrylate, isocyanatoethyl methacrylate, meta-isopropenyl-, -dimethyl isocyanate (TMI), omega-sulfoxyalkyl methacrylates and alkali salts thereof.

- 20.(new) Method according claim 13, wherein said dimer is a water-soluble oligomer having surface-active graft copolymers with a hydrophilic graft and a hydrophobic main chain.
- 21.(new) Method according to claim 14, wherein said dimer is a water-soluble oligomer having surface-active graft copolymers with a hydrophilic graft and a hydrophobic main chain.
- 22.(new) Method according to claim 15, wherein said dimer is a water-soluble oligomer having surface-active graft copolymers with a hydrophilic graft and a hydrophobic main chain.
- 23.(new) Method according to claim 17, wherein said dimer is a water-soluble oligomer having surface-active graft copolymers with a hydrophilic graft and a hydrophobic main chain.
- 24.(new) Method according to claim 13, wherein said surfactant is an anionic surfactant, present in an amount of from 0.1 up to 5 % by weight versus said monomer or monomer mixture.
- 25.(new) Method according to claim 14, wherein said surfactant is an anionic surfactant, present in an amount of from 0.1 up to 5 % by weight versus said monomer or monomer mixture.

- 26.(new) Method according to claim 15, wherein said surfactant is
an anionic surfactant, present in an amount of from 0.1 up to 5 % by weight
versus said monomer or monomer mixture.
- 27.(new) Method according to claim 17, wherein said surfactant is
an anionic surfactant, present in an amount of from 0.1 up to 5 % by weight
versus said monomer or monomer mixture.
- 28.(new) Method according to claim 13, wherein said latex
particles have an average particle size of less than 100 nm, being more
than 20 % less than if prepared in the absence of said CTA.
- 29.(new) Method according to claim 14, wherein said latex
particles have an average particle size of less than 100 nm, being more
than 20 % less than if prepared in the absence of said CTA.
- 30.(new) Method according to claim 15, wherein said latex
particles have an average particle size of less than 100 nm, being more
than 20 % less than if prepared in the absence of said CTA.
- 31.(new) Method according to claims 17, wherein said latex
particles have an average particle size of less than 100 nm, being more
than 20 % less than if prepared in the absence of said CTA.
- 32.(new) Method according to claim 20, wherein said latex
particles have an average particle size of less than 100 nm, being more
than 20 % less than if prepared in the absence of said CTA.

- 33.(new) Method according to claim 24, wherein said latex particles have an average particle size of less than 100 nm, being more than 20 % less than if prepared in the absence of said CTA.
- 34.(new) Method according to claim 28, wherein said latex particles have an average particle size of from 10 to 90 nm.
- 35.(new) Use of ultrafine hydrophobic latex particles of polymers and copolymers, prepared according to the method of claim 13, in printing plates for computer-to-plate or computer-to-press applications, in silver halide based graphic, medical, cinematographic and micrographic film materials, in photoresist applications and in ink-jet media.
- 36.(new) Use of ultrafine hydrophobic latex particles of polymers and copolymers, prepared according to the method of claim 14, in printing plates for computer-to-plate or computer-to-press applications, in silver halide based graphic, medical, cinematographic and micrographic film materials, in photoresist applications and in ink-jet media.
- 37.(new) Use of ultrafine hydrophobic latex particles of polymers and copolymers, prepared according to the method of any of the claim 15, in printing plates for computer-to-plate or computer-to-press applications, in silver halide based graphic, medical, cinematographic and micrographic film materials, in photoresist applications and in ink-jet media.

- 38.(new) Use of ultrafine hydrophobic latex particles of polymers and copolymers, prepared according to the method of any of claim 17, in printing plates for computer-to-plate or computer-to-press applications, in silver halide based graphic, medical, cinematographic and micrographic film materials, in photoresist applications and in ink-jet media.
- 39.(new) Use of ultrafine hydrophobic latex particles of polymers and copolymers, prepared according to the method of claim 20, in printing plates for computer-to-plate or computer-to-press applications, in silver halide based graphic, medical, cinematographic and micrographic film materials, in photoresist applications and in ink-jet media.
- 40.(new) Use of ultrafine hydrophobic latex particles of polymers and copolymers, prepared according to the method of claim 24, in printing plates for computer-to-plate or computer-to-press applications, in silver halide based graphic, medical, cinematographic and micrographic film materials, in photoresist applications and in ink-jet media.
- 41.(new) Use of ultrafine hydrophobic latex particles of polymers and copolymers, prepared according to the method of claim 28, in printing plates for computer-to-plate or computer-to-press applications, in silver halide based graphic, medical, cinematographic and micrographic film materials, in photoresist applications and in ink-jet media.

42.(new) Use of ultrafine hydrophobic latex particles of polymers and copolymers, prepared according to the method of claim 34, in printing plates for computer-to-plate or computer-to-press applications, in silver halide based graphic, medical, cinematographic and micrographic film materials, in photoresist applications and in ink-jet media.